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ABSTRACT

As part of a study of the inclusion of English language learners (ELLs) in large-scale assessments, this study investigated the potential role of student preference in the use of accommodations with large-scale assessments and the effects of two test accommodations, providing extra assessment time and reading test items aloud, on the standardized test performance of 106 ELLs in seventh-grade social studies classrooms. In addition, the study investigated the relationships among the accommodations students preferred and these background variables: (1) length of time in the United States; (2) amount of education prior to arrival in the United States; and (3) English language proficiency. Students completed a background questionnaire and a standardized test in social studies without accommodations. They were then asked to identify which of the two accommodations they would prefer. A parallel form of the test was administered with accommodations. One third of the students received the accommodation they preferred, while a third received the accommodation not of their preferences, and the other third received one of the accommodations at random. Data analysis found that students did not improve their performance significantly with either accommodation, even when given their preferred accommodation. No significant relationships were found between accommodation preference and various background variables. An appendix contains the study questionnaire. (Contains 12 tables and 21 references.) (SLD)

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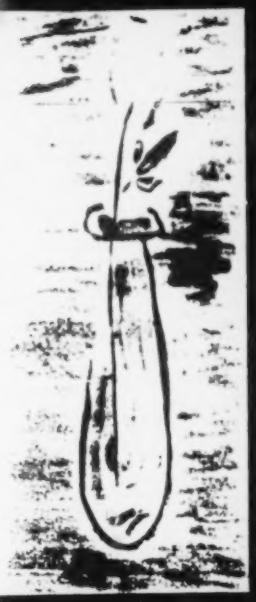

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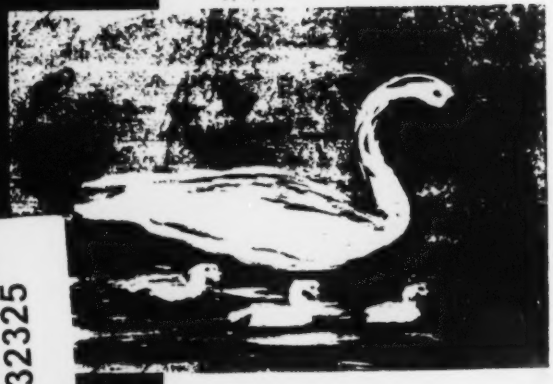

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June 2000

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The research presented in this report was carried out as part of a larger study funded by the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) to investigate ways in which English language learners (ELLs) can be included in large-scale testing with the goal of fair and equitable assessment for all students. This is the second in a series of reports meant to contribute to the better understanding of ELL performance on large-scale assessments. The conceptual groundwork for the study was laid by the first report (Butler & Stevens, 1997). The broad study design and implementation were Center efforts, which provided a research environment for examining the impact of test-taker preference for accommodations, the focus of this report. The larger study was supervised by Frances A. Butler and coordinated by Robin Stevens.

The research reported here is the result of the cooperative efforts of educators and colleagues at UCLA and elsewhere who recognize the importance of a better understanding of the performance of English language learners in our schools. Without the support of all involved, this work would not have been possible. In particular, the project is indebted to the Burbank Unified School District and the Riverside Publishing Company for participating as partners in this research.

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A sincere thank you for the contributions of all who participated at every stage of the research.

THE IMPACT OF PREFERENCE FOR ACCOMMODATIONS: THE PERFORMANCE OF ENGLISH LANGUAGE LEARNERS ON LARGE-SCALE ACADEMIC ACHIEVEMENT TESTS[1]

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Abstract

In an effort to include English language learners (ELLs) in large-scale, content-knowledge assessments, some educators have begun to use accommodations, defined as modifications to a test or to the manner in which a test is administered. To date, however, there is no conclusive evidence that accommodations aid students in demonstrating their content knowledge on standardized tests.

This study investigates the potential role of student preference in the use of accommodations with large-scale assessments and the effects of two test accommodations—providing extra assessment time and reading test items aloud—on the standardized test performance of ELLs in seventh-grade social studies classrooms. Additionally, the study investigates the relationships between the accommodations students prefer and the following background variables: their length of time in the United States, amount of education prior to arrival in the United States, and English language proficiency.

Students completed a background questionnaire and a standardized test in social studies without accommodations. Students then were asked to identify which of two accommodations they preferred. A parallel form of the standardized test was administered with accommodations. One third of the students received the accommodation of their preference, a third received the accommodation not of their preference, and a third received one of the two accommodations at random.

Data analysis found that students did not significantly improve their performance on the accommodated test with either accommodation, even when given their preferred accommodation. Data analysis also found no significant relationships between accommodation preference and various background variables.

Standardized tests traditionally have been a controversial issue among educators, policymakers, and parents alike. Questions concerning their usefulness and appropriateness are continually debated. Do the standardized tests that are

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[1] The work reported here originally appeared in: Castellon, M. (1999). *The impact of preference for accommodations: The performance of English language learners on large-scale academic achievement tests.* Unpublished master's thesis, University of California, Los Angeles. This report is slightly modified from the original.

employed in school districts today accurately measure what students are being taught in school? Are students required to respond to the items included in tests in a manner similar to that which is required of them in the classroom? Questions such as these and many more are fodder for discussion for teachers, parents, and others who are concerned that students are given a fair shake in the assessment game.

The current debate over how to provide students with limited English proficiency in grades kindergarten through 12 with equal access to the curriculum complicates the issue of assessment even further. Not only are educators concerned with making sure ELLs access the same rich curriculum as their native-English-speaking counterparts, educators also are concerned with the inclusion of these students in large-scale assessments. According to Butler and Stevens (1997):

> Students who speak English as a second language are often systematically excluded from large-scale assessments, in spite of Title I provisions of the Improving America's Schools Act which require that ELLs be included in assessments to the extent practicable. (p. 1)

The work of Cummins and Collier helps to shed light on the reasons why students with limited English proficiency are continually excluded from large-scale assessments. According to Cummins (1979, 1980), most ELLs take between one and three years to develop the basic interpersonal communication skills (BICS) that allow them to communicate in English at a very superficial level with peers and teachers. The time it takes ELLs to acquire the cognitive academic language proficiency (CALP) that is necessary for them to actively participate in their classroom learning, however, is between five and seven years (Collier, 1987; Cummins, 1981).

These findings lead researchers to ask a variety of questions that address issues of equity in large-scale assessments. If students for whom English is a second language are still acquiring knowledge of academic vocabulary and sentence structure in addition to academic language functions such as comparing, contrasting, analyzing, and evaluating, are their scores on content-based assessments as meaningful as the scores of students who have spoken English all of their lives? If test scores are used to make comparisons with regard to the performance of native and non-native English speakers, are those comparisons fair? Furthermore, to what extent do ELLs' scores on content-based assessments reflect their knowledge of the content, and to what extent do they reflect their difficulties in interpreting the language used in the test stimuli?

While the rationale for excluding ELLs from assessments designed for students in mainstream classrooms seems reasonable, a consequence of such exclusion is that they are not held to the same high standards of achievement as their native-English-speaking peers. That's because no standardized data exist to facilitate the tracking of these students' progress nor the identification of their strengths and weaknesses.

To date there have been few options for alternative methods of assessment for these students. For students in elementary bilingual classrooms, standardized tests in academic content areas such as language arts and math are administered in the students' native language when available. In an effort to include ELLs in large-scale assessments where testing in the native language is not possible or not appropriate, educators in some states have begun to use accommodations or test modifications as a means of facilitating the assessment of ELLs' content knowledge.

Butler and Stevens (1997) define accommodations as "support provided students for a given testing event either through modification of the test itself or through modification of the testing procedure" (p. 5). Types of test modifications that currently are being investigated include simplifying the English language used in test items (Abedi, Lord, & Plummer, 1997; Aguirre-Muñoz, 2000), providing translations of the test questions in the students' native language (Abedi et al., 1997; Aguirre-Muñoz, 2000), the reading aloud of test items by the test administrator, and allowing students to use an English glossary during the test (Abedi, Hofstetter, Baker, & Lord, 1998). Test modifications also may include the addition of visual supports (Butler & Stevens, 1997), although no studies have investigated this strategy to date. Modifications in testing procedure that also are under investigation include providing extra assessment time (Abedi, Hofstetter, Baker, & Lord, 1998) and the use of oral directions in the students' native language.

This study investigates two accommodations: providing extra assessment time and reading the test items and directions aloud. The rationale for selecting extra assessment time as an accommodation is based on the premise that if language itself poses a problem for ELLs, students under normal testing conditions may not be able to carefully consider all of the items on the test. Allowing them more time to complete the test may lead to their being able to respond accurately to more items. The rationale for investigating the read-aloud accommodation is that some students may be more prone to respond to both visual and oral stimuli than they would be to visual stimuli alone. For example, if a student does not understand one or more of the words on a test item, having the test administrator read the words aloud in the

context of the entire question, using proper intonation, might help the student better understand the question and hence respond appropriately. The fact that both types of accommodations could be implemented without additional testing materials and without modifications of existing testing materials also played a part in their selection for this study.

As will be noted in the review of the literature, the number of studies that have been conducted on the use of accommodations in large-scale assessments are few and have been at best preliminary in their findings. While some have addressed the question of which accommodations are most appropriate for particular subgroups of students, none as of this writing have addressed the issue of considering students' preferences as a means of selecting an appropriate accommodation. This study aims to investigate whether students are able to select the accommodation that will allow them to better demonstrate the content knowledge they have acquired.

Research Questions

The research questions for this study are as follows:

- Do ELLs perform significantly better on a test of content knowledge when given either one of the accommodations used in this study?
- Do ELLs perform significantly better on a test of content knowledge when given their choice of accommodation with the assessment?
- Is there a relationship between the type of accommodation students prefer and the following background variables: the amount of time students have lived in the United States, the amount of formal education students received prior to their arrival in the United States, and students' English language proficiency?

The first question addresses whether either one of the accommodations affects student performance, whereas the second question focuses on the effect of providing students with their preferred accommodation. The third question can be viewed as an outgrowth of question number two. If, for example, this study revealed that receiving their preferred accommodation did in fact make a difference in students' test performance, then it would be important to investigate whether there are similarities among the types of students who select each accommodation. Identifying such patterns might aid test administrators in properly assigning accommodations in the future.

Limitations of the Study

The limitations of the study fall into two categories: threats to the study's external validity and threats to the study's internal validity. Potential threats to the study's external validity address the ability to generalize the findings. It is important to note that the findings from this study might not generalize to other students and other settings because it is unknown to what extent the sample used in this study is representative of ELLs in other situations. A description of the characteristics of the test takers in this study is included in the Methodology section.

A second potential threat to the study's external validity is the fact that the results might not generalize to other standardized achievement tests, as each test is different, and may not assess the same constructs in the same way as the standardized tests used in this study. Finally, a third potential threat to the study's external validity is the possibility that the results might not generalize to other types of accommodations.

Threats to the internal validity of the study include the extent to which one can attribute the study's outcome to the treatment, which, in this case, is a combination of preference and accommodation. It is important to note that the sample of students selected for this study was not composed of students who were randomly selected from the entire population of seventh grade ELLs in the Burbank Unified School District. Rather, the students in the sample were selected because of their membership in previously formed classroom groups. As a result, the six classroom groups participating in the study were not completely homogenous in composition. One classroom in particular contained a large percentage of students with relatively low levels of English proficiency, while other classrooms contained a relatively small percentage of students with low levels of English proficiency. These pre-existing differences could account in part for any cross-classroom discrepancies in the performance of students on the accommodated versions of the test. This quasi-experimental research design, then, makes it impossible to control for pre-existing differences in the groups selected, and consequently poses a potential threat to the internal validity of the study.

Assumptions

In considering the procedures described in the Methodology section of this report, the following assumptions were made:

- Students took the tests seriously and attempted to do their best on each one.
- Students were not coached by the teacher, test administrator, or other individual during the test; all work was their own.
- Standard test administration procedures were followed.
- The statistical assumptions underlying multiple regression analysis were not violated. (This will be addressed further in the results section).

Significance of the Study

The study is significant in several respects. First, it is significant in that it will help advance our present understanding of the effects of accommodations with ELLs. Such understanding is critical in determining whether accommodations suggest a practical solution to the problem of assessing the content knowledge of ELLs in English. This study also is significant because it will help to elucidate the role that student preference may play in the assignment of accommodations in the future.

Because so little research has been conducted in test accommodations for ELLs to date, this study is considered exploratory. In addition to helping to answer the research questions cited above, this study is meant to provide practical experience that will help researchers design future accommodations studies more effectively.

Review of the Literature

Although practitioners and researchers have been in agreement on the limitations of using standardized tests for assessing achievement among ELLs (Ascher, 1991; Olmedo, 1981; Zirkel, 1972), to date little has been published regarding the types of accommodations that may be used with students from diverse cultural and linguistic backgrounds (August & Hakuta, 1997; Thurlow, Liu, Erickson, Spicuzza, & El Sawaf, 1996). Consequently, no solid research base exists to support the use of accommodations on large-scale assessments. In reviewing the extant literature, I will provide a rationale for the study of accommodations as an alternative to traditional assessments for ELLs, discuss previous research on preference as it relates to writing assessments, identify the issues to be considered and the steps that need to be taken prior to the implementation of accommodations, and finally, cite studies that suggest the implications of their use.

Accommodations: A Rationale

The rationale for the use of accommodations on large-scale assessments is based on a growing body of evidence that ELLs' knowledge of content frequently goes underestimated using current methods of assessment (LaCelle-Peterson & Rivera, 1994). In an effort to examine the role that language plays in the performance of ELLs on content-based assessments, Abedi et al. (1997) conducted a study using data from the mathematics section of the National Assessment of Educational Progress (NAEP) for eighth grade. In this study, the researchers found that subjects who predominantly spoke a language other than English in the home had lower overall math proficiency scores than students who reported speaking only English at home. Furthermore, the difference in scores between the two groups was found to be greater for those test items that were identified by the researchers as linguistically complex.

Other findings further reveal language to be a confounding factor on the mathematics performance of ELLs. Students in the same NAEP study were grouped according to whether they reported always, sometimes, or never speaking a language other than English in the home. Upon examination of the proportion of omitted or not-reached items by students in these groups, researchers found that in nearly every case, students who always spoke a language other than English in the home had much higher percentages of omitted/not-reached items than the students who spoke only English at home.

Although these studies were conducted in only one content area, mathematics, their findings are important because they suggest what educators long have considered to be true: language may impede the performance of ELLs on content assessments. Such findings have prompted researchers to call on states and school districts to responsibly report on the educational progress of ELLs in terms of their developing English proficiency and content knowledge (LaCelle-Peterson & Rivera, 1994).

Preference in Writing Prompts

Although the issue of accommodation preference has not been investigated with respect to large-scale standardized assessments for ELLs, student preference of writing prompts has long been used in writing assessments and is well documented. The rationale for allowing students to select a writing prompt is remarkably similar to the rationale for allowing students to select their own accommodation. According

to Polio and Glew (1996), "the primary reason for offering students a choice of prompts is the belief that students should be allowed to choose a prompt that will enable them to display their best writing." Indeed university students themselves lend credence to such reasoning as 24 of the 26 English-as-a-Second-Language (ESL) students tested felt that they chose the writing prompt that best allowed them to demonstrate their essay-writing ability (Polio & Glew, 1996).

Interestingly, a study of high school students who took Advanced Placement tests in U.S. and European history found that examinees generally made the correct choice when selecting the writing topic on which they could get a higher score. In their 1997 study, Bridgeman, Morgan, and Wang found that 52% of students taking the Advanced Placement examination in U.S. history received higher scores on their preferred topic. The same was found to be true for 58% of the students who took the European history test. While these studies do not involve the same type of students as those investigated in the present study, their findings indicate that students are often able to identify the mechanisms that allow them to perform at their best.

Guidelines and Considerations

As a way of providing initial guidance to researchers and educators, Butler and Stevens (1997) offer a comprehensive look at the issues that must be addressed in considering the use of accommodations with ELLs on large-scale assessments. Among the questions they consider are (a) How do educators decide which accommodations are suitable for which students? (b) To what extent do accommodations impact student performance? and (c) What are the effects of the accommodations on the validity of the assessments with which they are used? Rather than suggest that accommodations are the answer to the problem of assessment for ELLs, the authors stress the need to determine through solid research the effectiveness of various types of accommodations in a range of assessments, the need to identify subgroups of students who may benefit from the use of accommodations, and the need to establish guidelines for their use.

Another consideration mentioned in the work of Thurlow et al. (1996)—one that is not addressed in this study—is that of determining which types of accommodations allow ELLs to demonstrate what they know and which types of accommodations give them an unfair advantage over monolingual students. Future studies must clearly address this issue if states are to adhere to the principle of fair and equitable assessment for all students.

A final mention should be made in regard to the practicality of administering accommodations on large-scale assessments. According to Abedi, Lord, and Hofstetter (1998), "more attention should be given to the feasibility of administering different forms of accommodations for LEP [limited English proficient] students. If the most effective form of accommodation is not practical or logistically possible, it may not be useful" (p. ix).

Identifying Background Variables

According to Butler and Stevens (1997), determining which background variables are most indicative of student performance may aid assessment specialists in deciding which groups of students would benefit from various accommodations. Researchers have identified the following background variables for further investigation: English language proficiency (Abedi, Hofstetter, Baker, & Lord, 1998; Abedi, Lord, & Hofstetter, 1998; Butler & Stevens, 1997), amount of formal schooling prior to arrival in the United States (Butler & Stevens, 1997), and length of time in the United States (Abedi, Lord, & Hofstetter, 1998; Butler & Stevens, 1997). All three of these variables are investigated in the present study.

Studies on Linguistic Modifications and Native Language Assessment

After finding that language did in fact play a role in ELLs' NAEP mathematics performance, Abedi et al. (1997) modified 20 original NAEP math items to reduce their linguistic complexity. Two test booklets were prepared, one containing the 20 original linguistically complex items, and one containing the modified versions of the original items. After both booklets were administered to a sampling of 1,031 native- and non-native-English-speaking eighth graders, ELLs showed no statistically significant gains on the modified version. Their scores overall, however, were found to be significantly lower than those of native-English-speaking students.

In a separate NAEP study, Abedi, Lord, and Hofstetter (1998) administered test items to three groups of students at random. One group received test items in English as they appeared on the original assessment. A second group received linguistically modified test items in English, and a third group received the test items in Spanish. Subsequent analyses revealed that students scored best on the linguistically modified test items in English (where all students demonstrated marked improvement), and worst on the test items in Spanish.

Studies on the Use of Glossaries and Extra Assessment Time

Common among today's practitioners is the belief that bilingual students process information more slowly in their less familiar language, which in turn accounts for their slower test-taking speed (Ascher, 1991). LaCelle-Peterson and Rivera (1994), however, attribute the need for additional testing time to differences in the rate at which students learn a second language. The issue of how much assessment time to allow ELLs prompted Abedi, Hofstetter, Baker, and Lord (1998) to conduct a study in which students were administered 35 NAEP mathematics items with one of the following accommodations: extra assessment time, the use of a glossary for non-mathematical terms, and the use of a glossary plus extra assessment time. Although students benefited from having extra assessment time, ELLs were found to benefit more from the double accommodation of a glossary plus extra time. Students showed no significant improvement when allowed to use a glossary without extra time, possibly due to the time that elapsed while consulting the glossary.

Implications

Results from the Abedi, Lord, and Hofstetter study (1998) indicate that all students would benefit from more clearly worded math problems. Modifying the language of NAEP test items in mathematics does not always yield improved test scores for ELLs, however, as indicated by Abedi et al. (1997) above. More research is necessary to determine when and for whom modifying the language of test items is beneficial.

Regarding the use of translation as an accommodation strategy, poor performance on the Spanish version in the second NAEP study suggests that students tend to perform best when the language of the test matches the language of mathematics instruction (Abedi, Lord, & Hofstetter, 1998).

In terms of the glossary-plus-extra-time accommodation, its success prompts questions as to whether the use of combined accommodations is more effective than their individual use. Finally, more studies are needed to test the efficacy of these accommodations in other content areas.

Methodology

The study's design was quasi-experimental and included a pre-test and a post-test, multiple treatments, and multiple comparison groups.

Setting

The study took place in Burbank, California, a quiet, mostly middle-class, predominantly white suburb of Los Angeles. Burbank's immigrant population is composed primarily of Latinos and Armenians; however, other language groups also are represented.

Of the 14,350 students enrolled in the school district in 1997, 6,713 (46.8%) spoke languages other than English at home. Table 1 shows the breakdown of the other languages spoken.

Of the 6,713 students who spoke languages other than English at home in 1997, 3,277 (or 22.8% of the total student population in Burbank Unified School District) were designated limited English proficient (LEP).

Students in 6 seventh-grade social studies classrooms from the Burbank Unified School District participated in this study. All were selected to participate in the study on the basis of their "sheltered" status by the district's coordinator of student and program assessment and evaluation. Sheltered classrooms are composed of ELLs whose low English language proficiency does not allow them to be placed in regular mainstream English classrooms. The content in sheltered classrooms is delivered by the teacher using special techniques designed to make the content more accessible to students whose English skills are still developing.

Table 1

Other Languages Spoken in the Burbank Unified School District

	# of students who speak the language	% of total district population
Spanish	3,972	27.7
Armenian	1,241	8.7
Korean	375	2.6
Filipino (Tagalog)	273	1.9
Arabic	214	1.5
Vietnamese	92	.6
Other	546	3.8
Total	**6,713**	**46.8**

Several differences among participating classrooms should be noted. The six participating classrooms represented three different Burbank schools. The schools generally reflected the demographics of the entire school district. Table 2 indicates the school with which each classroom was associated as well as the various class configurations represented in the research sample.

Classrooms A and B consisted exclusively of ELLs who received sheltered instruction in social studies. Classroom C, however, was composed of a mix of sheltered and mainstream English-only (EO) students. All non-LEP students from this classroom were excluded from all research activities at the request of the school.

Classrooms D, E, and F all came from School 3, and classrooms D and F were also composed of a mix of sheltered and mainstream English-only students. Although some students in these classrooms were not ELLs, all students participated in every survey and test that was administered. Classroom E was a special case. This was a designated English language development (ELD) class because its students were, on the whole, newer to the United States than students from other classrooms. Consequently, their English skills were on average lower than those of ELLs in the other classrooms. Despite the students' ELD status, the content in this classroom also was delivered using sheltered techniques.

All three of the schools participating in this study offered support for their ELL populations with sheltered and ELD classrooms. The resources available to ELLs at each school site were therefore comparable.

Table 2

Participating Schools and Classrooms

	School 1	School 2	School 3
Classroom A	Sheltered		
Classroom B		Sheltered	
Classroom C		Sheltered & EO[a]	
Classroom D			Sheltered & EO
Classroom E			ELD
Classroom F			Sheltered & EO

Note. EO = English only; ELD = English language development.

[a] All non-LEP students from this classroom were excluded from all research activities at the request of the school.

Participants

The sample consisted of 106 seventh-grade ELLs in six classes as illustrated in Table 3.

Table 4 displays the countries of origin of the 48 students in the sample who were born outside the United States.

Table 3

Number of ELLs From Each Classroom

Classroom	# of ELLs
Classroom A	18
Classroom B	27
Classroom C	12
Classroom D	13
Classroom E	20
Classroom F	16
Total	**106**

Table 4

Countries of Origin

Countries	Number of students
Armenia	14
Mexico	13
Iran	4
Philippines	4
Syria	3
Germany	2
Ecuador	1
Egypt	1
El Salvador	1
India	1
Nicaragua	1
Pakistan	1
Russia	1
Thailand	1
Total	**48**

Of the 106 students in the sample, 101 reported speaking at least one language other than English at home (Table 5). Furthermore, 50 students reported speaking two or more languages (English included in some cases) at home.

Of the 48 students who were born outside of the United States, 10 had lived here less than one year, 10 had lived here between one and three years, and 28 reported having lived in the United States for more than three years. Further, 44 out of the 106 students in this sample had attended school outside the United States. Table 6 shows the number of years these students attended school in other countries.

Table 5

Languages Spoken in the Home

Languages	Number of students
Spanish & English	36
Spanish	29
Armenian	11
Armenian & English	9
Arabic	4
Tagalog	4
Armenian & Russian	1
Armenian, Persian & German	1
Armenian, Persian, German & English	1
Armenian, Russian & English	1
Persian & English	1
Punjabi	1
Thai	1
Urdu	1
Total	**101**

Table 6

Number of Years of School in Other Country

Years	Number of students
One year or less	12
2 years	9
3 years	5
4 years	2
5 years	3
6 years or more	13
Total	**44**

Instruments

A student background questionnaire developed by the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) was administered in order to gather information regarding students' first language, country of origin, the number of years they had lived in the United States, the amount of formal schooling they had received in their home country, etc. (see Appendix A). Part of the data from this questionnaire was used in answering Research Question 2.

Permission was granted by The Riverside Publishing Company to use two parallel forms (K and L) of the Iowa Tests of Basic Skills (ITBS) Social Studies Test for 7th Grade/Level 13 (The Riverside Publishing Company, 1993). The Social Studies tests, which consist of 44 multiple-choice items, emphasize the use and understanding of concepts, principles, and selected visual materials from the following content areas: history, geography, political science, economics, sociology, and anthropology. In accordance with the procedures specified in the test administration booklet, students had 30 minutes to complete the test.

Another instrument used in this study consisted of a preference questionnaire, also developed by CRESST, in which students were asked to answer the following question: "What would help you do better on this test?" Students selected one of two available answers: (a) having extra time, and (b) having the test items and directions read out loud (see Appendix B).

Another test was administered in order to assess students' English-reading ability. The Language Assessment Scales Reading Component Form 3A (LAS-Reading 3A) (Duncan & De Avila, 1990) is a 55-item multiple-choice test consisting of five separate subtests: synonyms, fluency, antonyms, mechanics, and reading for information. Because the LAS-Reading 3A is not a timed test, students were given as much time as necessary in order to complete it. Collecting information on students' English-reading ability was necessary in order to answer Research Question 3.

Procedures

During the first visit to each classroom, the student background questionnaire was administered. Although the questionnaire was piloted and revised before its use in this study, some students with lower English proficiency had difficulty understanding the wording of several of the questions. When necessary, both the

researcher and the classroom teacher assisted students with completing the background questionnaire.

On a second visit to each classroom one week later, the social studies test from Form L of the ITBS was administered. During the test some students asked questions about specific test items, especially with regards to vocabulary. The test administrator informed these students that she was unable to help them on the test but that they should try their best to select the correct response. Several students were unable to complete the entire test either because they did not know the answers to the questions or because they ran out of time. The majority of the students, however, answered all of the questions on the test.

Upon finishing the test, each student was given the preference questionnaire. Students had little difficulty responding to this question. A few students expressed their belief that neither one of the options would allow them to improve their performance on a similar test. In these instances, students were asked to indicate this belief on the questionnaire, but to select one of the two available choices anyway.

Two weeks later, Form K of the ITBS social studies test was administered in all six participating classrooms using one of the two accommodations under investigation. Two classes were given their preferred accommodation, as stated on the preference questionnaire; two classes were given the opposite of their preferred accommodation; and two classes were randomly assigned one of the two accommodations. The criteria used to decide which classrooms would receive each treatment were based primarily on the following considerations: (a) classroom composition (was the classroom exclusively composed of ELLs, or was the class composed of both ELLs and native English speakers as was the case in two of the classrooms?) and (b) creating a well-balanced sample (it was important to have roughly equal numbers of students in each treatment group).

Lists of the students who would receive each accommodation were prepared in advance of the second ITBS administration. Upon arrival at each classroom, test administrators separated students into two groups. Students in the read-aloud group were taken to the school library or to another classroom to take the test while students in the extra-time group took the test in their own classroom or moved to an alternate location. After students were situated in their testing location, test administrators read the test directions aloud. Minor modifications to the test directions were made so as to maintain consistency with the accommodations being

used. Students who received extra time were given 50 minutes to complete the test (20 minutes extra). This meant that the testing session was conducted in two class periods. None of the students in the sample required all 50 minutes to complete the test. In fact most students completed the test in less than 40 minutes. Students in the read-aloud group were read the entire test out loud and were given up to seven minutes to review their responses at the end. Ten to 15 seconds were allowed between most test items. On the average, the read-aloud test took about 15 minutes longer to administer than the one which allowed extra time.

During a final visit to each classroom three weeks later, the LAS-Reading 3A was administered. Several students in classrooms A, B, C, and E required more than one class period to complete the test.

Table 7 illustrates which classrooms participated in each of the research activities.

Analyses

Multiple regression analyses were used for Research Questions 1 and 2, as it was necessary to control for pre-existing differences among students in the sample. Correlational analyses (point biserial and Kendall's Tau were used in answering Research Question 3. All statistical analyses were performed using SPSS version 6.1 for Macintosh (SPSS, 1995).

Table 7

Classrooms Participating in Research Activities

	Week 1	Week 2	Week 2	Week 4	Week 4	Week 4	Week 7
Classroom	Background questionnaire	ITBS without accom.	Preference questionnaire	ITBS with preferred accom.	ITBS with opposite of preferred accom	ITBS with random accom.	Language assessment scales
A	X	X	X	X			X
B	X	X	X		X		X
C	X	X	X		X		X
D	X	X	X			X	X
E	X	X	X			X	X
F	X	X	X	X			X

Note. Accom. = accommodation.

Results

This section reports on the reliability coefficients for all three tests used in this study. A discussion of the descriptive statistics and statistical assumptions underlying multiple regression will follow. Next, the correlations of the variables in the regression equation will be reported. Lastly, the results of the regression analyses as they relate to all three research questions will be presented.

Reliability

In computing the reliability coefficients for all three tests, it was found that the reliability coefficient for Form L of the ITBS was .569, and the reliability coefficient for Form K was .378. The reliability coefficient for the LAS-Reading 3A was .864.

Descriptive Statistics

The descriptive statistics for Forms L and K of the ITBS and the LAS-Reading 3A are presented in Table 8.

In Table 8, we see that the mean score on Form L was 12.83 whereas on Form K the mean was 15.10. The standard deviation on Form L was 5.03 compared to 4.02 on Form K. The mean score on the LAS was 37.49 with a standard deviation of 7.97.

Statistical Assumptions

Since the research questions only address the performance and accommodation preference of ELLs, the data from the native-English-speaking students were excluded prior to conducting the analyses. Univariate distributions of all of the test scores were examined and all were found to be normal. A review of the bivariate

Table 8

Descriptive Statistics for the ITBS Forms L & K and for the LAS-Reading 3A

Statistic	ITBS Form L Not accommodated	ITBS Form K Accommodated	LAS Reading 3A
N	96	96	96
# of Items	44	44	55
Mean	12.83	15.10	37.49
Std. Deviation	5.03	4.02	7.97
Min-Max	0-28	6-28	19-55
Skewness	.25	.49	-.06
Kurtosis	.24	.67	.47

scatterplots and plots of standardized residuals showed that the following assumptions underlying linear regression were met:

- Normality
- Linearity
- Equal variance

Correlations

The product-moment correlations and significance levels of all of the variables used in the regression analyses were calculated and are found in Table 9. "Received preference" refers to whether or not a student received his/her preferred accommodation on the accommodated test and "Accommodation received" refers to the accommodation that the student received on Form K.

As seen in Table 9, the only significant ($\rho < .05$) correlation exists between total score on Form L and total score on Form K. Hence, it was expected that the test score on Form L (not accommodated) would be a significant predictor of performance on Form K (accommodated).

Regression Analyses

Multiple regression analyses were utilized in answering Research Questions 1 and 2 in order to control for pre-existing differences among students in their knowledge of the content. Research Question 1 addresses the issue of whether students perform significantly better on the ITBS when receiving either one of the two accommodations used in this study. Research Question 2 addresses whether

Table 9

Correlation Matrix for Variables in the Regression Equation

	Total score Form K	Total score Form L	Received preference	Accommodation received
Total score Form K	1.000			
Total score Form L	.476 .000	1.000		
Received preference	.007 .471	.060 .276	1.000	
Accommodation received	.048 .319	-.003 .487	-.137 .089	1.000

students perform significantly better on the ITBS when receiving the accommodation of their preference. Forced entry was used to ensure that all of the variables were in the equation using Total Score on Form K of the ITBS as the dependent variable. Table 10 presents the raw regression weights (*B*), their associated standard errors (*SE B*), the standardized regression weights (β), the *t*-statistic (*t*) and the significance levels (ρ) for all three variables in the equation, as well as the multiple *R*, R^2, and adjusted R^2 for the regression equation.

Research Question 1: Do ELLs perform significantly better on a test of content knowledge when given either one of the accommodations used in this study? As Table 10 indicates, the regression weight for accommodation was not significant, indicating that neither one of the accommodations significantly affected student performance on Form K of the ITBS.

Research Question 2: Do ELLs perform significantly better on a test of content knowledge when given their choice of accommodation with the assessment? The regression weight for receiving one's preference also was not significant, indicating that receiving their preferred accommodation did not significantly affect students' performance on Form K. The answer to Research Questions 1 and 2, therefore, is that neither of the two accommodations used in this study significantly affected students' performance even when students received their preferred accommodation.

Research Question 3: Is there a relationship between the type of accommodation students prefer and the following background variables: the amount of time students have lived in the United States, the amount of formal education students received prior to their arrival in the United States, and students' English language proficiency?

To investigate this question, it was necessary to examine the correlations between the accommodations students preferred and each of the aforementioned

Table 10

Results of Regression Analysis

Variable	*B*	*SE B*	β	*t*	ρ
Total L	.383344	.072609	.476570	5.280	.0000
RecPref	-.119308	.730589	-.014880	-.163	.8706
Accom	.381614	.731354	.047459	.522	.6030

Note. Multiple $R = .48$. $R^2 = .23$. Adjusted $R^2 = .20$.

background variables. Point biserial correlations were calculated to ascertain the degree of relationship between accommodations preferred and number of years students attended schools in other countries. The same correlation was computed in investigating the relationship between accommodations preferred and English-reading ability as measured by the LAS-Reading 3A. Because the data for number of years in the United States were ordinal, it was necessary to use Kendall's tau-c in order to find the correlation between accommodation preferred and the number of years students have lived in the United States. These results may be found in Table 11.

As can be seen in Table 11, no significant correlations were found between the accommodations that students preferred and the three background variables in question: the amount of time students have lived in the United States, the amount of formal education students received prior to their arrival here, and students' English language proficiency.

Discussion

In this section, explanations for each of the study's outcomes are provided. The following topics are covered: research questions, test reliability coefficients, additional findings, and concluding remarks.

Research Questions

The first finding to be addressed is the fact that neither of the two accommodations used in the study had a significant effect on the accommodated test performance of students in this sample. The obvious explanation that students could

Table 11

Correlations Between Accommodation Preferred and Selected Background Variables

	Accommodation preferred	Significance
Amount of time in U.S.	.158 tau-c	(N.S.)
Years attended school in other country	.009 rpbis	(N.S.)
Language Assessment Scales (LAS)	.048 rpbis	(N.S.)

perform equally well without any accommodations, while perhaps appealing, is overly simplistic because of other factors that need to be considered. In considering possible explanations for why the accommodations did not make a difference, we must first explore the issue of opportunity to learn. Many of the skills that were tested on the ITBS may not have been taught to the students in the sample either in seventh grade or earlier in their schooling. If students had not had the opportunity to learn and develop these skills, then no type of accommodation would have allowed students to improve their performance on the accommodated test. Indeed, this was a concern voiced by several students while responding to the preference questionnaire.

A second possible explanation for why the accommodations were not found to significantly impact student performance has to do with the difficulty of the vocabulary included on the ITBS. During both ITBS administrations, several students asked test administrators to explain the meaning of various words on the test. These remarks suggest that many students in the research sample may not have been familiar with the type of academic vocabulary used in the ITBS. If this indeed were the case, neither one of the accommodations used in this study would have mitigated the difficulty of interpreting vocabulary items. Hence, one would expect that no significant improvement would have been noted on the accommodated test.

A third possible explanation for the lack of improvement of test scores on the accommodated ITBS addresses the level of English reading ability of the students in the sample. As indicated by mean LAS-Reading 3A scores in all six classrooms, students tended to score relatively high on the 55-item test (see Table 8). This could indicate that students with relatively high English reading levels as determined by the LAS-Reading 3A may not benefit from the use of accommodations. Future data analysis at CRESST will investigate whether accommodations in fact benefited students with lower English reading levels.

The fact that the sample size in this study consisted of only 106 students should not escape mention as it too may have contributed to the insignificance of gains made on the accommodated test. In fact, having a larger sample size may have ensured a less homogeneous sample, which in itself may have produced different results. As mentioned previously, however, the study was meant to be exploratory. Rather than answering the question of the usefulness of accommodations definitively, the study was meant to shed light on the benefits and drawbacks of the

research design before conducting more costly accommodations studies on a larger scale.

Finally, one must consider the possibility that the accommodations used in this study simply do not work. Future studies may find that other accommodations or combinations of accommodations yield very different results when used with a similar student population.

In exploring reasons why receiving a preferred accommodation also had no impact on student performance, one must consider the possibility that students may have chosen their preferred accommodation poorly. Selecting the accommodation that would have best suited them would have required students to be able to assess their abilities by asking themselves the following question: Do I have greater difficulty finishing the test in the time allowed, or do I have greater difficulty reading and understanding the test items by myself? It is impossible to estimate what percentage of the students would have had the self-awareness necessary to ask themselves these questions. Furthermore, due to time constraints, test administrators did not discuss the intricacies of what receiving each of the accommodations would entail. Had students known that receiving extra time would allow them 20 minutes longer to take the exam, and that having the test read aloud to them would require that they follow the pace of the test administrator in completing the test, they might have chosen the accommodation that was more appropriate to their particular needs.

The fact that no significant correlations were found between student preference for accommodation and all three selected background variables (time in the United States, amount of formal education prior to arrival here, and level of English language proficiency) indicates that student preference for accommodation was a highly personal decision. What also must be considered is the possibility that neither one of the accommodations may have appealed to a majority of students. Were the sample size larger and less homogeneous in terms of language ability, and were there more than two accommodations offered as available choices, we might in fact have seen a different pattern emerge.

Test Reliability Coefficients

Among the many findings from the analyses were the low reliability coefficients of Forms L and K of the ITBS. The alpha reliability coefficients found for the two tests, .569 and .378 respectively, were below what is considered acceptable

for a reliability coefficient (normally .80 and above). These findings are due, at least in part, to the small variance in the distribution. The distribution of scores was extremely positively skewed. In addition, the technical summary for the ITBS indicates that only .9% of the norming sample included LEP students (The Riverside Publishing Company, 1994). All of these points taken together raise significant questions regarding the appropriateness of test items for this sample of ELLs.

Additional Findings

In carrying out the regression analyses, it was discovered that the LAS-Reading 3A was a significant predictor of performance on Form K. Table 12 shows the results of the regression analysis when the following variables were entered into the regression equation: total score on ITBS Form L, total score on LAS-Reading 3A, number of years of education prior to arrival in the United States, preference received, and time in the United States. Again, total score on Form K is the dependent variable.

As seen in the regression analysis discussed previously, total score on Form L is a significant predictor on Form K ($\rho < .05$). What was not seen previously, however, is that performance on the LAS-Reading 3A is also a significant predictor on Form K ($\rho < .01$). Given these results, one may hypothesize that the higher the score on the LAS-Reading 3A, the higher the score will be on Form K of the ITBS. Additionally, one may hypothesize that the lower the score on the LAS-Reading 3A, the more the student stands to benefit from the accommodations used in this study. Further analyses at CRESST will attempt to determine the nature of the relationship between these two variables.

Table 12

Results of Regression Analysis with LAS-Reading 3A as Independent Variable

Variable	*B*	*SE B*	β	*T*	ρ
Total L	.249730	.080399	.311532	3.106	.026
Total LAS	.223636	.051805	.437661	4.317	.0000
Prior ed	.022942	.252075	.016535	.091	.9277
Rec pref	-.301726	.742770	-.037174	-.406	.6856
<1 yr in U.S.	1.512436	2.445639	.099314	.618	.5380
1-3 yrs in U.S.	.598542	2.066801	.046130	.290	.7728
>3 yrs in U.S.	.025266	.868665	.002844	.029	.9769

Note. Multiple $R = .6122$. $R^2 = .37487$. Adjusted $R^2 = .32215$.

Concluding Remarks

Although not named as a research question, one of the reasons for conducting this study was to determine the practicality of administering accommodations according to student preference. What has been learned from this study is that student choice for accommodation is more complex than originally thought. Questions regarding students' ability to properly self-select an accommodation and the number of accommodations that should be offered as choices to students are extremely difficult to answer. Rather than continuing to investigate the efficacy of using student-preferred accommodations, it would be more feasible to first determine which single accommodation or combination of accommodations are most beneficial to students with a given set of language characteristics. For example, in the light of results reported in the Additional Findings section above, consideration should be given to examining the effects of the same two accommodations on populations of students with lower levels of English proficiency.

Further, since opportunity to learn may have played a part in the outcome of this study, additional research might focus on determining the usefulness of accommodations on tests that are more closely aligned to the classroom curriculum. If future studies found that the same two accommodations used in this study were effective when used with assessments that contain only material that students have been exposed to previously, researchers would be able to more confidently assert that accommodations are beneficial where opportunity to learn is not an issue. Alternatively, if future studies found that providing extra assessment time and reading the test items aloud did not significantly impact student performance on tests aligned to classroom curriculum, researchers might reasonably conclude that factors other than opportunity to learn affect the usefulness of the accommodations.

Finally, researchers must concern themselves with the very issue that test accommodations are designed to promote: the fair and equitable assessment of all students. Addressing questions regarding the validity of using standardized tests (with or without accommodations) with ELLs is as important a question as asking whether accommodations provide certain groups of students an unfair advantage over others. Such questions must not be overlooked and are indeed essential in bringing about positive change in traditional assessment practices and the policies that affect them.

References

Abedi, J., Hofstetter, C., Baker, E., & Lord, C. (1998). *NAEP math performance and test accommodations: Interactions with student language background* (Final report submitted to U.S. Department of Education, National Center for Education Statistics). Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing.

Abedi, J., Lord, C., & Hofstetter, C. (1998). *Impact of selected background variables on students' NAEP math performance* (CSE Tech. Rep. No. 478). Los Angeles: University of California, Center for the Study of Evaluation.

Abedi, J., Lord, C., & Plummer, J. (1997). *Final report of language background as a variable in NAEP mathematics performance* (CSE Tech. Rep. No. 429). Los Angeles: UCLA Center for the Study of Evaluation.

Aguirre-Muñoz, Z. (2000). *The impact of language background characteristics on complex performance assessments: Linguistic accommodation strategies for English language learners.* Unpublished doctoral dissertation, University of California, Los Angeles.

Ascher, C. (1991, March). Testing bilingual students: Do we speak the same language? *PTA Today*, 7-9.

August, D., & Hakuta, K. (Eds.). (1997). *Improving schooling for language minority children.* Washington, DC: National Academy Press.

Bridgeman, B., Morgan, R., & Wang, M. (1997). Choice among essay topics: Impact on performance and validity. *Journal of Educational Measurement, 34*, 273-286.

Butler, F. A., & Stevens, R. (1997). *Accommodation strategies for English language learners on large-scale assessments: Student characteristics and other considerations* (CSE Tech. Rep. No. 448). Los Angeles: UCLA Center for the Study of Evaluation.

Collier, V. (1987). Age and rate of acquisition of second language for academic purposes. *TESOL Quarterly, 21*, 617-641.

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimal age question, and some other matters. *Working Papers on Bilingualism, 19*, 197-205.

Cummins, J. (1980). The entry and exit fallacy in bilingual education. *NABE Journal, 4*(3), 25-59.

Cummins, J. (1981). Age on arrival and immigrant second language learning in Canada: A reassessment. *Applied Linguistics, 2*, 132-149.

Duncan, S. E., & De Avila, E. A. (1990). *Language Assessment Scales. Reading/Writing. Reading Component Form 3A.* Monterey, CA: CTB/McGraw-Hill.

LaCelle-Peterson, M., & Rivera, C. (1994). Is it real for all kids? A framework for equitable assessment policies for English language learners. *Harvard Educational Review, 64,* 55-75.

Olmedo, E. (1981). Testing linguistic minorities. *American Psychologist, 36,* 1078-1085.

Polio, C., & Glew, M. (1996). ESL writing assessment prompts: How students choose. *Journal of Second Language Writing, 5*(1), 35-49.

SPSS® for the Macintosh™ (Release 6.1) [Computer software]. (1995). Chicago: SPSS Inc.

Thurlow, M., Liu, K., Erickson, R., Spicuzza, R., & El Sawaf, H. (1996). *Accommodations for students with limited English proficiency: Analysis of guidelines from states with graduation exams* (Minnesota Rep. 6). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

University of Iowa and The Riverside Publishing Company. (1993). *Iowa Tests of Basic Skills. Social Studies Test Forms K & L.* Chicago: The Riverside Publishing Company.

University of Iowa and The Riverside Publishing Company. (1994). *Riverside 2000* (Technical Summary 1). Chicago: The Riverside Publishing Company.

Zirkel, A. (1972). Spanish-speaking students and standardized tests. *The Urban Review, 5,* 32-40.

APPENDIX A

Name: _____ Date: _____

Age: _____ Grade: _____

Student Background Questionnaire

Please read all questions carefully before answering them.

1. Were you born in the United States?

   Yes ____ No ____

   If **no**, where were you born? _____

2. How long have you lived in the United States? Check one only.

   Less than one year ____

   1 to 3 years ____

   Over 3 years ____

   All of my life ____

3. How many years gave you attended school in the United States?

   Less than one year ____

   1 to 3 years ____

   Over 3 years ____

4. What language/s do you speak at home? _____

5. In the United States, have you ever been taught in another language, like Spanish or Armenian? (not English)

   Yes ____ No ____

   If yes, answer these questions:

   (a) How many years were you taught in that language? ____

   (b) What language was it? _____

   (c) Put a check (✓) next to the classes you had in that language

   ____ Language Arts ____ Science

   ____ Math ____ History/Social Science

   ____ Other

6. Are all of the classes that you are taking now taught in English?

Yes _____ No _____

If **no**, put a check (✓) next to the classes taught in another language.

_____ Language Arts _____ Science

_____ Math _____ History/Social Science

_____ Other

7. How long have you been taught just in English?

Less than one year _____

1 to 3 years _____

Over 3 years _____

8. Have you ever gone to school in another country?

Yes _____ No _____

If **yes**, answer these questions:

(a) What country or countries did you go to school in?

_____

(b) How many years did you go to school there?

_____

(c) What language/s did your teacher speak?

_____

9. Have you ever studied English in another country?

Yes _____ No _____

If **yes**, how many years did you study English in that country? _____

10. Have you ever studied another language after school or on the weekend in the United States?

Yes _____ No _____

If yes, answer these questions:

(a) What language/s have you studied? _____

(b) How many years have you studied the language/s? _____

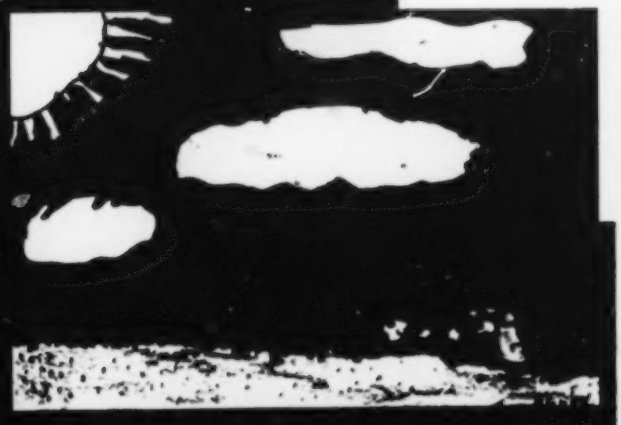
APPENDIX B

Name: _____ Teacher: _____

What would help you do better on this test? Circle only one.

a. Having more time

b. Having the test questions read out loud to me



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